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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/831,915 | 05/25/2001 | Thomas Daniel | 208608US0PCT | 2083 |

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| EXAMINER | |
|---|---|
| METZMAIER, DANIEL S | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 1712 | |

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/831,915 | DANIEL ET AL. | |
| | Examiner | Art Unit | |
| | Daniel S. Metzmaier | 1712 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *29 October 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-7 and 10-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7 and 10-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *10/29/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

Claims 1-7, 10-17 are pending.

### *Information Disclosure Statement*

1. The information disclosure statement filed October 29, 2004 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Applicants provide the abstract without the Japanese Patent. The abstract has been cited in the PTO-892 for applicants' convenience.

### *Specification*

2. The disclosure is objected to because of the following informalities: the paragraph bridging pages 6 and 7 of the specification refers to figure 8 having elements (37), (39) and (40) in an apparatus set forth in EP-A-0 640 330 and not otherwise disclosed herein. Said disclosure describes the measure of the "gel layer permeability (GLP)".

Although said subject matter is NOT incorporated by reference, it is noted that the incorporation of essential material in the specification by reference to a foreign application or patent, or to a publication is improper.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1, 4-7, 10-15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sekisui Plastics Co LTD, JP 06-016822, as evidenced by the JPO machine translation at http://www19.ipdl.jpo.go.jp/PA1/cgi-bin/PA1INDEX. Sekisui Plastics Co LTD (abstract,

paragraphs [0010] and [0011], and examples 1 and 6) discloses water absorbing resin particles employing by the addition of lithium silicate ($Li_2O_3Si$).

The structure denoted ($Li_2O_3Si$) equates to $Li_2O$ x n $SiO_2$, wherein n = 1. Sekisui Plastics Co LTD (paragraph [0010]) discloses partially neutralized absorptive resins. These would inherently read on alkali metal hydroxide neutralized salts. Sekisui Plastics Co LTD (paragraph [0001]) discloses absorbing materials for sanitary goods. The pH of 3.5 to 9.0 would be inherent for said utilities as a hypoallergenic pH.

Sekisui Plastics Co LTD (example 1) discloses the materials are dried. Applicants have not shown the temperature of drying, the pH of the hydrated hydrogel, or the gel permeability of the hydrated gel to impart patentable distinction to the dried products.

Regarding the gel permeability, said permeability has been given little patentable weight since the conditions said permeability was measured have not been set forth. It is reasonable to conclude that the prior art dried gels would read on gels having a GLP of not less than 25 x $10^{-7}$ $cm^3$sec/g or not less than 4 x $10^{-7}$ $cm^3$sec/g under the appropriate conditions. Said properties of the gels do not impart patentable distinction to the dried products claimed.

To the extent the properties of the alkali metal silicate and/or the properties of the gels in the Sekisui Plastics Co LTD reference differ from the claims, some variation of the gel properties would have been an obvious variation since the materials are disclosed for the same utility and since the gel strength is a commonly known product variable.

To the extent the Sekisui Plastics Co LTD reference differ in that it is silent regarding the neutralization with and an alkali metal hydroxides and salts are the most common neutralizing agents employed in neutralizing resins. Alkali metal hydroxide or alkali metal carbonates would have been obvious neutralizing agents for neutralizing the partially neutralized absorbing resins, to one having ordinary skill in the art at the time of applicant's invention. There is no evidence of record that any particular alkali metal would be unexpected in view of the prior art use of lithium silicates.

7. Claims 1-7 and 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over The Procter & Gamble Company (hereafter P & G), WO 97/46189. P & G (abstract examples and claims) disclose absorbent articles having odor control comprising a combination of an absorbent gelling material and silica.

P & G differ from the instant claims in an exemplified process of making[1] and an exemplified absorbent articles as claimed and the ratio of the sodium oxide to silica.

P & G (page 4, lines 1 et seq) discloses absorbent gelling materials useful in the P & G materials. Said absorbent gelling agents disclosed include hydrogel-forming polymer materials prepared from polymerizable, unsaturated, acid-containing monomers.

P & G (page 5, first full paragraph) discloses the hydrogel-forming absorbent gelling agents are partially neutralized with cations including alkali metals. P & G (page 7, ~lines 16-18) discloses the silica may be provided from sodium silicates. While the ratio of alkali metal oxide to silicate are not specifically disclosed, said ratio reads on

commercially available water glass (i.e., sodium silicate). It would have been obvious to one of ordinary skilled in the art at the time of applicants' invention to employ a commercially available sodium silicate generally having a sodium oxide to silica ratio of about 0.5.

P & G (page 8, second paragraph) discloses ratios of gelling agents to silica of from 1:5 TO 1:1. Said ratio would read on the concentrations of claims 2 and 3.

P & G (page 8, forth paragraph) discloses the odor control system may be incorporated into the absorbent article by any of the methods known in the art. Applicants have not shown the process, which the hydrogels are capable of absorbing fluids, impart patentable distinction over those disclosed and claimed in the P & G reference.

P & G (page 5, first full paragraph) discloses the hydrogel-forming absorbent gelling agents are partially neutralized with cations including alkali metals. Sodium hydroxide is an obvious alkali metal source for carboxylic acid neutralization. P & G (page 1, third full paragraph) discloses the use of carbonates in controlling odors in acidic pH environments. P & G (pages 1 and 2) further discloses the use of combinations of odor controlling agents.

It would have been obvious to one of ordinary skilled in the art at the time of applicants' invention to employ alkali metal hydroxide and/or alkali metal carbonate in combination with the sodium silicate disclosed and claimed in the P & G reference for the advantage of controlling odor in an acidic odor environment.

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[1] "Even though product-by-process claims are limited by and defined by the process, determination of

It is generally *prima facie* obvious to use in combination two or more ingredients that have previously been used separately for the same purpose in order to form a third composition useful for that same purpose. ***In re Kerkhoven***, 626 F.2d 846, 205 USPQ 1069 (CCPA 1980); ***In re Pinten***, 459 F.2d 1053, 173 USPQ 801 (CCPA 1972); ***In re Susi***, 440 F.2d 442, 169 USPQ 423 (CCPA 1971); ***In re Crockett***, 279 F.2d 274, 126 USPQ 186 (CCPA 1960). As stated in Kerkhoven and Crockett, the idea of combining them flows logically from their having been individually taught in the prior art.

***Response to Arguments***

8. Applicant's arguments filed October 29, 2004 have been fully considered but they are not persuasive.

9. Applicants (pages 8 and 9) assert the alkali metal silicate is added before drying and therefore the hydrogel is necessarily different from the prior art since the silicate is homogeneously distributed throughout the hydrogel. This has not been deemed persuasive for the following reasons. As noted previously, (1) product-by-process claims are examined based on the product rather than the methods said products are made. (2) Furthermore, applicants' claims allow for admixing the silicate to the polymer after polymerization and before drying. The prior art (paragraphs [0024], [0031], [0032]) discloses the homogeneous mixing of the polymers and the silicate to form bridged polymers. (3) Applicants do not show that the hydrogel processing imparts a patentable distinction to the compositions.

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patentability is based on the product itself". See MPEP 2113.

Applicants (page 9) assert that JP 06-016822 employs low water amounds and therefore produces a different product. This has not been deemed persuasive since applicants claims do not define the water content of the hydrogel during admixing of the silicate or before drying. Applicants claims broadly read on the prior art materials.

10. Applicants (pages 9 and 10) assert the odor control agents of the WO 97/46189 reference may be coated on the core of the absorbent materials or incorporated into the fibers of said materials. Applicants' claims allow for admixing the silicate to the polymer after polymerization and before drying. Applicants do not show that the hydrogel processing imparts a patentable distinction to the compositions. The WO 97/46189 reference discloses incorporating the odor control agents "within the fibers of the absorbent core. Said incorporation would is deemed indistinct from the claimed incorporation.

Applicants arguments regarding admixing the odor control agents to the monomer solution is not deemed persuasive since applicants contemplate admixing after polymerization.

11. The examiner has properly cited and considered the abstract, Derwent abstract of JP 56133028, provided for consideration.

***Conclusion***

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel S. Metzmaier whose telephone number is (571) 272-1089. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**Daniel S. Metzmaier**
**Primary Examiner**
**Art Unit 1712**

DSM